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1997-06

Connectors for optical fibres and cables –

Part 14-4:

**Detail specification for fibre optic adaptor
(simplex) type SC for multimode fibre**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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CONNECTORS FOR OPTICAL FIBRES AND CABLES –

Part 14-4: Detail specification for fibre optic adaptor (simplex) type SC for multimode fibre

FOREWORD

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International Standard IEC 60874-14-4 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

The text of this standard is based on the following documents:

FDIS	Report on voting
86B/874/FDIS	86B/1003/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

The references to clauses or subclauses of IEC 60874-1 indicated in this part apply to the third edition of IEC 60874-1.

CONNECTORS FOR OPTICAL FIBRES AND CABLES**Part 14-4: Detail specification for fibre optic adaptor (simplex) type SC for multimode fibre**

NATIONAL STANDARDS ORGANIZATION:	 Date:
DETAIL SPECIFICATION IEC QC 910004XX0004. FIBRE OPTIC COMPONENT OF ASSESSED QUALITY IN ACCORDANCE WITH • GENERIC SPECIFICATION: QC 910000 (IEC 60874-1) • BLANK DETAIL SPECIFICATION: QC 910001 (IEC 60874-1-1)	
FIBRE OPTIC ADAPTOR	
CLASSIFICATION: Type: Name: SC For use in datacom applications as specified in ISO/IEC International Standard 11801: "Generic cabling for customer premises" Configuration: plug-adaptor-plug Coupling: push-pull Control dimensions: – Plug: see figures 1, 2 and 3 – Gauge: see figure 4 Variants: see page 8 Climatic category: 10/60/4 Environmental category: 4 Assessment level: A	
QUALIFICATION PROCEDURE: Fixed sample procedure	
SAFETY WARNING: Take care when handling small diameter optical fibre to prevent puncturing the skin, especially in the eye area. Direct viewing of the end of an optical fibre when it is propagating energy is not recommended unless prior assurance is obtained as to the safe energy output level.	

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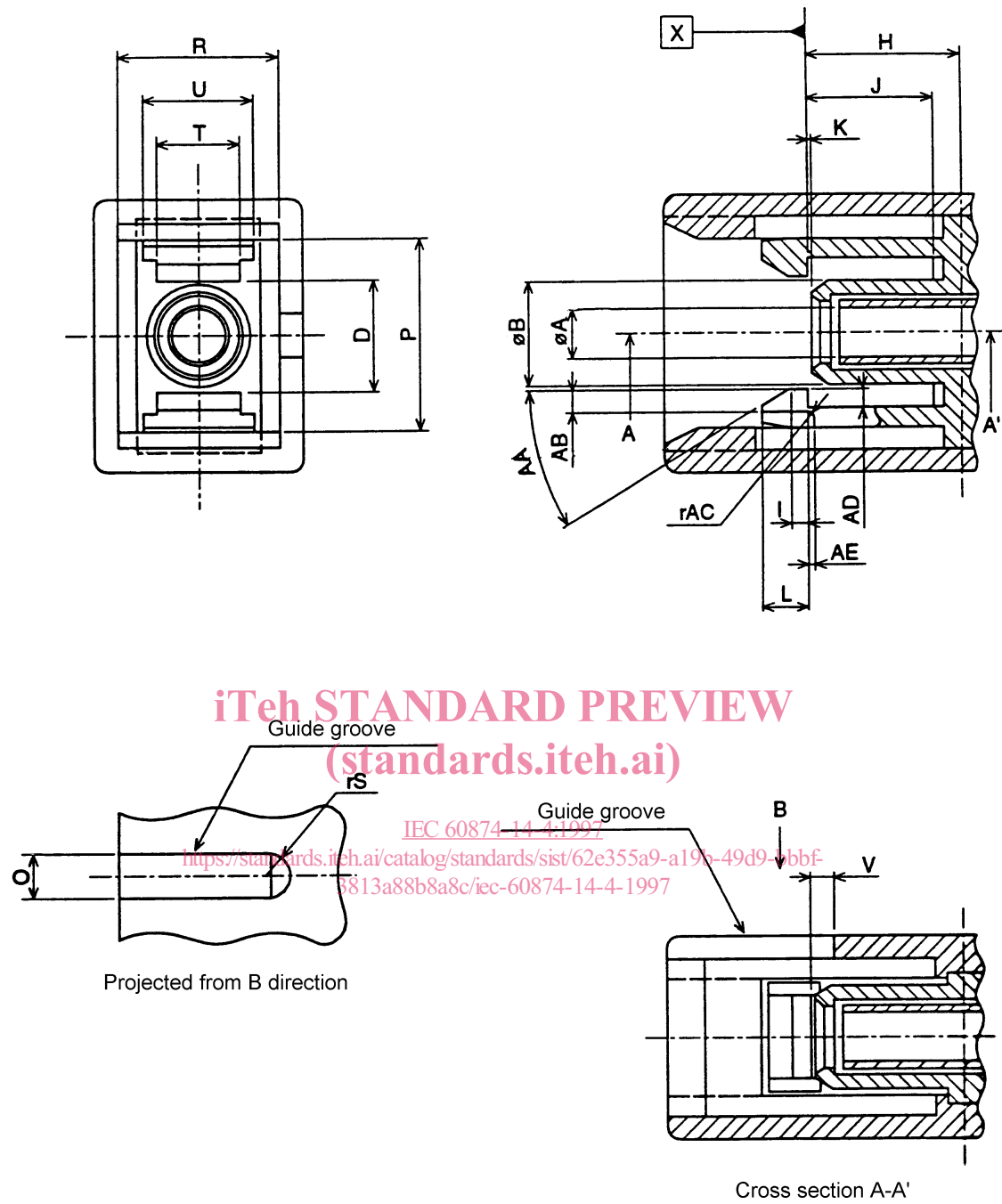


Figure 1 – Adaptor mating face dimensions

Reference	Dimensions		Notes
	Minimum	Maximum	
A	–	–	1
B	4,69 mm	4,79 mm	
D	4,9 mm	5,5 mm	
H	6,9 mm	7,1 mm	
I	0,4 mm	0,8 mm	
J	5,51 mm	5,9 mm	
K	0,06 mm	1 mm	
L	1,9 mm	2,1 mm	
O	2,0 mm	2,2 mm	
P	9,0 mm	9,1 mm	
R	7,4 mm	7,5 mm	
rS	1,0 mm	1,1 mm	
T	3,80 mm	4,04 mm	
U	5,0 mm	5,3 mm	
V	0,6 mm	1,6 mm	
AA	27°	33°	
AB	0,9 mm	1,0 mm	radius
rAC	0,4 mm	0,6 mm	
AD	0,7 mm	0,8 mm	
AE	0,4 mm	0,6 mm	

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NOTES

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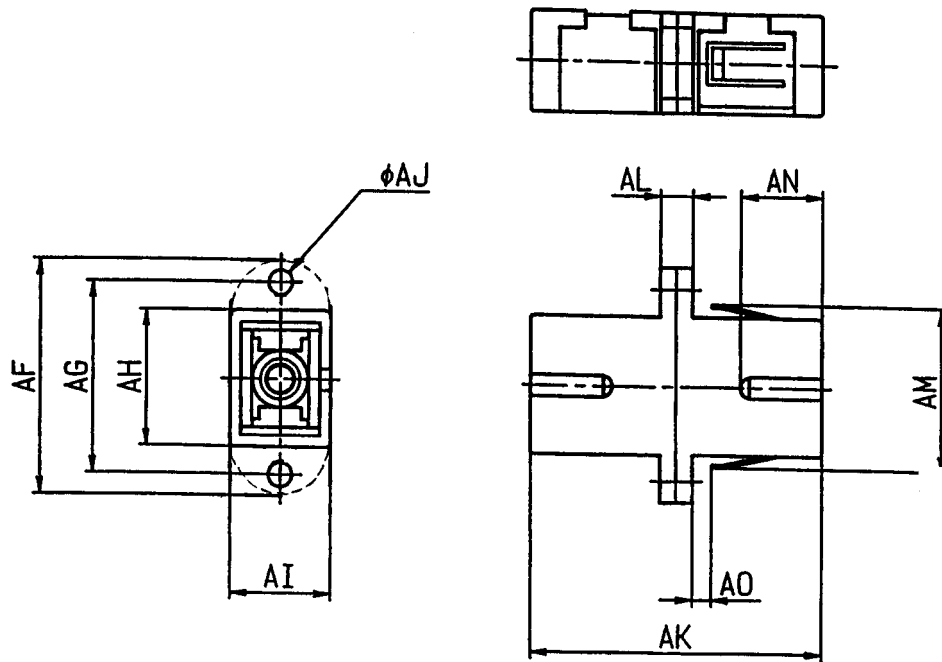
1 The connector alignment feature is an alignment sleeve. The gauge retention force shall be measured with two gauge pins, each inserted to the middle of the alignment feature. The gauge retention force shall be from 2,0 N to 5,9 N.

2 Where a tolerance of form is not specified, the limits of the dimensions for a feature control the form as well as the size.

3 Where interrelated features of size (features shown with a common axis or centre plane) have no geometric tolerance of location or run out specified, the limits of the dimensions for a feature control the location tolerance as well as the size.

4 Where perpendicular features (features shown at right angles) have no geometric tolerance of orientation or run out specified, the limits of the dimensions for a feature control the orientation tolerance as well as the size.

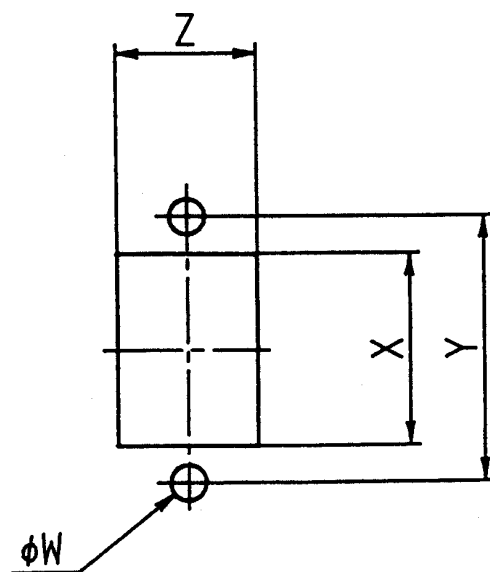
Figure 1 – Adaptor mating face dimensions (continued)



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Reference	Dimensions mm		Notes
	Minimum	Maximum	
AF	21,5	22,5	1
AG	17,5	18,5	
AH	12,6	13,0	
AI	9,2	9,4	
AJ	2,2	2,5	1
AK	27	27,8	
AL	2,8	3,2	
AM	14,4	16,4	
AN	7,7	8,0	2
AO	1,7	2,0	
NOTES			
1 The dotted lines indicate an example of the shape of the mounting flange. The largest portion of the mounting flange shall be within these dimensions.			
2 If the adaptor is mounted using this hook, the thickness of the panel shall be 1,6 mm.			

Figure 2 – Adaptor dimensions

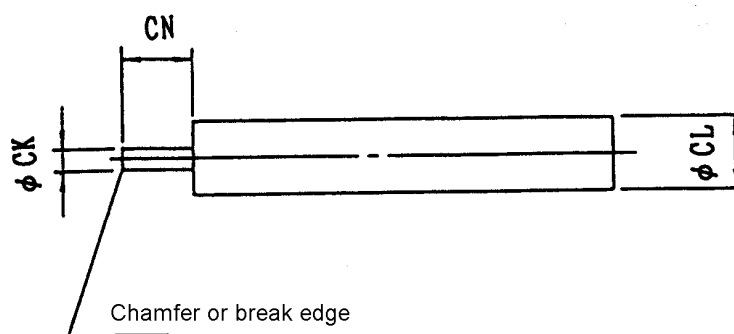


Reference	Dimensions mm		Notes
	Minimum	Maximum	
W	2,4	2,6	
X	13,1	13,6	
Y	17,9	18,1	
Z	9,5	10,0	

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Figure 3 – Panel piercing and mounting detail



Reference	Dimensions mm		Notes
	Minimum	Maximum	
CK	2,4985	2,4995	1
CL	2,8	4,8	
CN	7	15	
NOTE			
1 Surface roughness grade N4 (0,2 μm Ra).			

Figure 4 – Dimension of a pin gauge for an adaptor